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| APPLICATION NO.                                    | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|--|----------------|----------------------|------------------------|------------------|
| 10/826,956   | 04/15/2004     | Sun-Jay Chang        | TSM03-0924             | 2277             |
| 43859 7:   | 590 08/08/2006 |                      | EXAMINER               |                  |
| SLATER & MATSIL, L.L.P.                            |                |                      | CRANE, SARA W          |                  |
| 17950 PRESTON ROAD, SUITE 1000<br>DALLAS, TX 75252 |                |                      | ART UNIT               | PAPER NUMBER     |
| ,  |                |                      | 2811                   |                  |
|  |                |                      | DATE MAILED: 08/08/200 | 6                |

Please find below and/or attached an Office communication concerning this application or proceeding.

| 7  | Application No.  | Applicant(s)  |  |  |  |
|--|--|---|--|--|--|
|  | 10/826,956   | CHANG ET AL.  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |
|  | Sara W. Crane  | 2811  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |  |   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | I.  nely filed  the mailing date of this communication.  D (35 U.S.C. § 133). |  |  |  |
| Status   |  |   |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>18 May 2006</u> .   |  |   |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)☐ This   | This action is <b>FINAL</b> . 2b) This action is non-final.  |   |  |  |  |
| 3) Since this application is in condition for allowa   | ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |   |  |  |  |
| Disposition of Claims  |  |   |  |  |  |
| 4)⊠ Claim(s) <u>1,3-24 and 40-42</u> is/are pending in the application.  |  |   |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |   |  |  |  |
| 5)⊠ Claim(s) <u>1 and 3-24</u> is/are allowed.   |  |   |  |  |  |
| 6)⊠ Claim(s) <u>40-42</u> is/are rejected.   |  |   |  |  |  |
| 7) Claim(s) is/are objected to.  |  |   |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.  |  |   |  |  |  |
| Application Papers   |  |   |  |  |  |
| 9) The specification is objected to by the Examiner.   |  |   |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |  |   |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |   |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |   |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |   |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |  |   |  |  |  |
| a) All b) Some * c) None of:   |  |   |  |  |  |
| 1. Certified copies of the priority documents have been received.  |  |   |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |   |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |  |   |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |  |   |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |  |   |  |  |  |
|  |  |   |  |  |  |
|  |  |   |  |  |  |
| Attachment(s)  |  |   |  |  |  |
| 1) Motice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date   |  |   |  |  |  |
| Notice of Diatisperson's Fatein Brawning Neview (170-340)   Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   Statement(s) (PTO-152)   Notice of Informal Patent Application (PTO-152)   Paper No(s)/Mail Date   Other:  |  |   |  |  |  |

Application/Control Number: 10/826,956

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishigaki et al.

As shown in figure 26 of the reference, there is a first transistor (at the right of the figure), with a second transistor in the center of the figure. A first insulating layer 101 is over both source and drain of the second transistor. A second insulating layer 103 is over source and drain regions of both transistors, and is over the first insulating layer.

101 is silicon oxide (column 17, line 68) and 103 is nitride (column 18, line 1). It would have been obvious that the chip is a "workpiece," as noted in Applicant's remarks of 9/22/05. Silicon dioxide would have been obvious in view of silicon oxide, because SiO<sub>2</sub> is silicon oxide. Absent any showing of criticality, layer thicknesses as recited would have been obvious, in order to form a small device having each device layer of thickness commensurate with other layers.

## Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Crane, whose telephone number is (571) 272-1652.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist, whose telephone number is (571) 272-1562.

Sara W. Crane Primary Examiner

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